

**AMENDMENTS TO THE DRAWINGS:**

The attached sheet of drawings includes changes to Fig. 3. This sheet, which includes Fig. 3, replaces the original sheet including Fig. 3. In Fig. 3, the cylindrical voice coil secured at one end thereof on a center of the elliptical vibrating diaphragm is now shown, as requested by the Examiner.

**Attachment(s):**

Replacement Sheet including Fig. 3

Annotated Sheet with changes to Fig. 3 being shown in red

### **REMARKS**

Applicants express appreciation to Examiner Le for the courtesy of the personal interview with the Examiner on March 22, 2006. Applicants have amended each of the independent claims to incorporate the claim language discussed with the Examiner at the personal interview. Also, Applicants are submitting a replacement sheet of drawings to incorporate certain features of the disclosure within Fig. 3 per the discussion with the Examiner at the interview. Claims 2-9, 14-16, and 20-29 are now pending.

In the Office Action dated December 1, 2005, the drawings are objected to under 37 C.F.R. 1.83(a); and claims 2-9, 14-16, and 20-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sariti (U.S. Patent No. 3,079,472) in view of Nakamura (U.S. Patent No. 4,969,196) and further in view of Lee et al. (GB 2,278,251) or Numa (JP 344118299). Applicants traverse these objections and rejections, at least for the following reasons.

As for the objection to the drawing, the Examiner stated in the Office Action that “the cylindrical voice coil secured at one end thereof on a center of the elliptical vibrating diaphragm must be shown or the feature(s) canceled from the claim(s).” Accordingly, Applicants are submitting herewith a replacement version of Fig. 3 showing the diaphragm and voice coil consistent with the recitation in the claims. Applicants advise that, consistent with the depiction in replacement Fig. 3, when an electric current (representing audio signals) flows through a voice coil wound around a lower portion of a diaphragm (with both the voice coil and the lower portion of the diaphragm being disposed in an annular gap acting as a magnetic field), the voice coil will move in a vertical direction according to Fleming’s left-hand rule in proportion to the electric current, thereby causing the diaphragm to vibrate in the same direction and thus producing an

output sound. At least in view of the submission of a replacement sheet for previous Fig. 3, Applicants respectfully request reconsideration and withdrawal of the objection to the drawings.

By this Amendment, Applicants have amended each of the pending independent claims to recite that “the rectangular frame has a stepped interior surface and an upper lip overhanging beyond the outer perimeters of the top plate, the plate-shaped magnet, and the back plate, wherein the stepped interior surface comprises a first horizontal surface that is substantially parallel to a top surface of the top plate, a second horizontal surface, located further from the top plate than the first horizontal surface, that is substantially parallel to the top surface of the top plate, a third horizontal surface, located further from the top plate than the second horizontal surface, that is substantially parallel to the top surface of the top plate, a first substantially vertical surface coupling the first horizontal surface to the second horizontal surface, and a second substantially vertical surface coupling the second horizontal surface to the third horizontal surface, and wherein the outer perimeter of the top plate extends beyond an outer perimeter of the first horizontal surface and the first substantially vertical surface. An example of this type of structure is shown in Figs. 2-4 of the instant application.

As indicated at the recent personal interview with the Examiner, Applicants submit that such recited claim structure is neither shown nor suggested by any of the applied references of record. Moreover, such structure provides advantages that do not result from the structures described in the various applied references.

For example, Applicants advise that a first advantage is that since the stepped interior surface of the rectangular frame comprises the recited first, second, and third horizontal surfaces, as well as the recited first and second substantially vertical surfaces, a speaker diaphragm can be

stably attached to such specifically stepped interior surface to inhibit some undesired movements thereof, thus ensuring a high quality sound outputted from the speaker.

Applicants advise that a second advantage is that since the outer perimeter of the top plate extends beyond an outer perimeter of the first horizontal surface and the first substantially vertical surface, the rectangular frame mounting and containing the diaphragm can be stably supported by the top plate, so that it is possible to obtain a higher stability for the diaphragm than Sariti (e.g., outer perimeter of top plate 12 does not extend beyond the first horizontal surface of frame 48), thereby ensuring that a high quality sound is outputted from the speaker.

Applicants submit that the applied art of record does not disclose or suggest the subject matter recited in each of the pending independent claims, for at least the reasons discussed above and at the recent Examiner interview. As recognized by the Examiner in the summary record provided to the undersigned at the conclusion of the interview, "It appears that the proposed claim language overcome[s] the Sariti reference." Moreover, Applicants submit that the advantages of the recited structure, which can be understood from the comments provided above, are not provided for by the applied art of record either. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections applied in the pending Office Action. A favorable action is awaited.

### **CONCLUSION**

In view of the foregoing, Applicants respectfully submit that all of pending claims 2-9, 14-16, and 20-29 are in condition for allowance, and a notice of such is earnestly solicited. Should the Examiner feel that there are any issues outstanding after consideration of this

response, the Examiner is invited to contact Applicants' undersigned representative to expedite the prosecution.

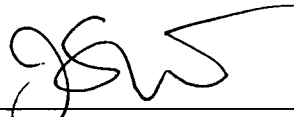
EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0573. This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

**DRINKER, BIDDLE & REATH LLP**

Dated: March 27, 2006

By:

  
\_\_\_\_\_  
John G. Smith  
Registration No. 33,818

**Customer No. 55694**

**DRINKER, BIDDLE & REATH LLP**

1500 K Street, N.W., Suite 1100

Washington, D.C. 20005-1209

Tel: (202) 842-8800

Fax: (202) 842-8465



ANNOTATED SHEET

FIG.3

